Detroit, Mich., in granting permission to work on the islands. The assistance received in the field will be acknowledged in the several papers.

The results of the expedition will be published in various journals and in the annual reports of the Michigan Academy of Science under the common title "Results of the Mershon Expedition to the Charity Islands, Lake Huron." As most of the field work was done in the late summer and fall, the survey plans to continue the work in the spring and early summer of 1911.

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ARTESIAN WATERS OF ARGENTINA

THE climate of a part of Argentina is semi-arid, and the geological formations which are regarded as Quaternary and Later Tertiary are in the western and central districts of the country saline to a degree which indicates prolonged duration of aridity. The region of the pampas which covers the province of Buenos Aires and stretches northward west of the Parana does not exhibit this characteristic, it having apparently long enjoyed a more humid climate, as it does now. The foot-hills of the Andes are also well watered. But with the exception of these last-named regions, a great part of the country suffers from lack of good water. This condition may, however, be in some measure relieved by proper development of artesian supplies. Many wells have been sunk already, but without adequate geological investigation. In the pampas water is found at a general depth of 20 meters more or less, and is pumped to the surface by windmills. It may be said that the development of the live-stock industry of Argentina would be impossible were it not for this supply which comes from eolian, alluvial deposits of Quaternary and Tertiary age. A different geological condition exists from the Rio Colorado southward in what may be best described as northern Patagonia. In that region there are local elevations occupying a middle position between the Atlantic and Pacific, composed of granites and older rocks possibly of Paleozoic age, and rising to altitudes of 300 to 1,000 meters. These mountains are not represented upon any map and their distribution is not known, but they have been described by Moreno and other explorers. Upon their flanks there is an extensive formation of gray sandstone which attains a thickness of several hundred feet and is very porous. It slopes gently toward the Atlantic and pure water flows from it in outcrops near the coast. The head of water in these strata is unknown. Further south in Patagonia the central sierra is replaced by plateau country and in Comodoro Rivadavia, in latitude 46 near the coast, wells which were sunk by the government in search of water developed petroleum. There is a large area in this region in which the geologic structure and the possibilities of artesian water need to be developed. In the great plains east of the Andes there are glacial deposits which may furnish superficial supplies like those of the Dakotas, and the marine Tertiary and Mesozoic strata afford conditions not unlike those of southern California. Here as well as in the valleys among the spurs of the Andes from Patagonia to Bolivia the geological structure is complicated and the problem of artesian water is one of peculiar difficulty as well as of great interest.

Our present knowledge of these conditions rests upon reconnaissance work and the stratigraphic and paleontologic observations of the Geological Survey of Argentina. No work based upon topographic maps and systematic structure has as yet been undertaken. The problem is therefore one whose elements are as yet to be developed. The Argentine government is using every means to encourage settlement and development of the rich agricultural regions which lie in the zone of sufficient rainfall east of the Andes, and also the vast grazing district of Patagonia. In order to afford ready communication it is building railroads at great national expense and operating them. The need of pure water for locomotive use as well as for other purposes has thus been made critically evident,

and the Minister of Public Works, Senor Ramos Nexia, has adopted a plan for making surveys for the determination of artesian water conditions along the lines of national railways. He contemplates topographical and geological surveys of a character similar to those executed by the U. S. Geological Survey, from which he derived the initial suggestion. He last summer applied to the U. S. government for the services of a geologist and such assistants as he might need, and our government has responded cordially to that request. Mr. Bailey Willis has accordingly entered into a contract for the term of two years, to execute topographical and geological surveys for the specific purpose of ascertaining artesian water possibilities in those districts which the minister may designate. With him are associated Mr. Chester W. Washburne, of the U. S. Survey, Mr. J. R. Pemberton, of Stanford University, and Mr. Wellington D. Jones, of Chicago University, as geologists, and Mr. C. L. Nelson and Mr. W. B. Lewis, as topographers, and the party sails shortly for Argentina to enter upon the work. While these surveys have a specific purpose, their possibilities of usefulness in developing the natural resources and encouraging settlement in the regions surveyed will not be overlooked, and the work will be founded on these scientific studies, upon which alone practical conclusions can safely rest. Thus it is hoped that a definite contribution to knowledge in geography and geology may be made.

It is desirable to point out that the Argentine government has a geological survey which has been in existence since 1903 in its present organization and which dates back half a century as a bureau of mines. It is under the direction of Senor E. M. Hermitte, who is assisted by Messrs. Bodenbender, Keidel and Schiller, three German geologists who have done excellent stratigraphic and paleontologic work, particularly in districts of the central Argentine Andes. They have unfortunately not been supplied with maps. The established Bureau of Mines, Geology and Hydrology is under the minister of agriculture. The surveys which are about to be made are undertaken by the minister of public works. The two operations are thus officially distinct, but it is hoped and anticipated that they may be mutually helpful.

THE ENGINEERING BUILDING OF THE UNIVERSITY OF CINCINNATI

The new $300,000 engineering building, and the new $150,000 power plant of the University of Cincinnati are rapidly nearing completion. The engineering building is of reenforced concrete and stone, four stories in height, built to accommodate five hundred students, and inasmuch as the greater number will be cooperative students, the building will accommodate one thousand.

Among the main features of the building will be a large laboratory 200×40 feet in size. This laboratory will be surrounded by balconies, which will give a much larger floor space than is indicated by the dimensions of the room itself. In addition to this there will be a large general club room for the students taking the regular engineering courses. There will also be a large consulting library, solely for the use of the College of Engineering.

The building will be fire-proof throughout and of the best possible construction. One marked feature of the building will be the absence of a great mass of heavy machinery which is usually found in engineering colleges. The students will possess the unique advantage of having at their disposal the use of the latest and most improved machinery in all of the different manufacturing industries having plants in the city of Cincinnati. They will gain their knowledge of the different operative processes at first hand in the great manufacturing establishments, for which Cincinnati is famous. This condition has permitted the use of space which would have otherwise been occupied by machinery for extensive scientific and research laboratories.

The power plant is one of the most extensive and thoroughly equipped in the country, and has been built to meet the needs of a growing university for many years to come. It will supply heat, light and power for all of the different buildings of the university.

One marked departure from the customary arrangement of university buildings will be